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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,796	09/29/2003	Akira Ishikawa	05911.0006.CNUS04	2224

27194 7590 12/28/2004

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EXAMINER
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RESAN, STEVAN A

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/675,796	<b>Applicant(s)</b> ISHIKAWA ET AL.	
	<b>Examiner</b> Stevan A. Resan	<b>Art Unit</b> 1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/554678.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 2, 4, 7-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are deemed undefined due to the following: Claim 1 - claims a resin layer serving as a non-recording surface - however servo indicia for tracking are considered recorded information: The examiner suggests "non-magnetic recording surface."

Claim 1 - "a region" and "the other major region". Is "a region" a "major region"?

The examiner suggests the use of "first" and "second" region terminology.

Claim 2 - "other major region" (see above); "prescribed" wavelength.

"prescribed" is deemed indefinite and speculative.

Claim 4 "said layer containing coloring matter" has no antecedent basis in claim 2 from which it depends; "prescribed" (see above).

Claim 7 - thin layer - "thin" is a relative term; "said layer containing coloring matter" has no antecedent basis in claims 4 or claim 2 from which it depends.

Claim 8 - "thin layer" "low melting point".

These are relative terms.

Claim 9 - "thin layer"

Claim 10 claims substantially the same invention as in claim 1.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,2,3,10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallack US 5,589,247.

Wallack et al disclose the invention substantially as claimed except for the tape having a thickness of 7um or less. However, the combined preferred thickness range of Wallack et al for the substrate, magnetic layer and blackcoat layer overlap the range of 7um or less. It would have been obvious to one of ordinary skill in the art to minimize tape thickness in order to maximize the amount of information on a given diameter tape reel. The limitation "for servo tracking has been treated as an intended use and given no weight.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3, 4, 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Evans et al U.S. 5,462,823.

See Fig. 2b, page 4, line 18, page 5, paragraph 2.

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7. Claims 2, 5, 6, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al as applied above and discussed below.

Evans et al do not disclose the differences in reflections or transmission as in claim 2, however it would have been obvious to one of ordinary skill in the art to maximize contrast between illuminated and non illuminated regions (See col. 5, lines 37-40).

Evans et al do not disclose the coefficient of friction on the non-magnetic recording side. However, Evans disclose the use of lubricants in or on the magnetic recording media side. Since these lubricants are intended to minimize the coefficient of friction for the magnetic layer and will transfer to the non-magnetic recording side of a tape when wound. The examiner takes the position that the transferred lubricant would also inherently lower the coefficient of friction of the non-magnetic recording side. It would have been obvious to one of ordinary skill in the art to minimize friction on both sliding surfaces since the non-magnetic recording side must transverse and contact guide pins.

Evans discloses a backcoating layer that may serve as an outermost layer containing binder and inorganic powder (Col 11 lines 52-57). Evans also discloses the alternative use of the radiation absorbing dye for generating or destroying an image. When an image is generated, it would have been obvious to one of ordinary skill in the art to protect it from degeneration due to generalized exposure to light and therefor employ a protective coating to filter the more destructive short wavelengths of light.


Claim 9 is deemed within the normal range of an optical servo track. (See background of present specification). It would have been obvious to one of ordinary skill in the art to adjust the servo track dimension depending upon the servo beam tracking equipment used. i.e. the diameter of the servo tracking beam.

8. Claim 8 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, set forth in this Office action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stevan A. Resan whose telephone number is 571-272-1513. The examiner can normally be reached on Tues-Thurs from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones, can be reached at 571-272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
STEVAN A. RESAN  
PRIMARY EXAMINER